

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,619DATE: 07/08/1999
TIME: 15:34:44

Input Set: I337619.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Krieg, Arthur M.
2 <120> TITLE OF INVENTION: Methods of Treating Cancer Using
3 Immunostimulatory Oligonucleotides
4 <130> FILE REFERENCE: C1039/7021/HCL
5 <140> CURRENT APPLICATION NUMBER: US/09/337,619
6 <141> CURRENT FILING DATE: 1999-06-21
7 <150> EARLIER APPLICATION NUMBER: US 08/960,774
8 <151> EARLIER FILING DATE: 1997-10-30
9 <150> EARLIER APPLICATION NUMBER: US 08/738,652
10 <151> EARLIER FILING DATE: 1996-10-30
11 <150> EARLIER APPLICATION NUMBER: US 08/386,063
12 <151> EARLIER FILING DATE: 1995-02-07
13 <150> EARLIER APPLICATION NUMBER: US 08/276,358
14 <151> EARLIER FILING DATE: 1994-07-15
15 <160> NUMBER OF SEQ ID NOS: 123
16 <170> SOFTWARE: FastSEQ for Windows Version 3.0
17 <210> SEQ ID NO 1
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19 <212> TYPE: DNA
20 <213> ORGANISM: Artificial Sequence
21 <220> FEATURE:
22 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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27 <212> TYPE: DNA
28 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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32 atcgacctac gtgcgttctc 20
33 <210> SEQ ID NO 3
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35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
37 <220> FEATURE:
38 <223> OTHER INFORMATION: Synthetic Oligonucleotide
39 <400> SEQUENCE: 3
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41 <210> SEQ ID NO 4
42 <211> LENGTH: 15
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence

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PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,619DATE: 07/08/1999
TIME: 15:34:44

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52	<213> ORGANISM: Artificial Sequence	
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54	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
55	<400> SEQUENCE: 5	
56	gagaacgtcg accttcgat	19
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59	<212> TYPE: DNA	
60	<213> ORGANISM: Artificial Sequence	
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62	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
63	<400> SEQUENCE: 6	
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65	<210> SEQ ID NO 7	
66	<211> LENGTH: 20	
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68	<213> ORGANISM: Artificial Sequence	
69	<220> FEATURE:	
70	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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72	tccatgacgt tcctgatgct	20
73	<210> SEQ ID NO 8	
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75	<212> TYPE: DNA	
76	<213> ORGANISM: Artificial Sequence	
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78	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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83	<212> TYPE: DNA	
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86	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
87	<400> SEQUENCE: 9	
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90	<211> LENGTH: 20	
91	<212> TYPE: DNA	
92	<213> ORGANISM: Artificial Sequence	
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94	<223> OTHER INFORMATION: Synthetic Oligonucleotide	

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,619

DATE: 07/08/1999
TIME: 15:34:44

Input Set: I337619.RAW

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102 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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114 <211> LENGTH: 15
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
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118 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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120 <221> NAME/KEY: modified_base
121 <222> LOCATION: (7)...(7)
122 <223> OTHER INFORMATION: m5c
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129 <220> FEATURE:
130 <223> OTHER INFORMATION: Synthetic Oligonucleotide
131 <220> FEATURE:
132 <221> NAME/KEY: modified_base
133 <222> LOCATION: (13)...(13)
134 <223> OTHER INFORMATION: m5c
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139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,619DATE: 07/08/1999
TIME: 15:34:44

Input Set: I337619.RAW

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154 <223> OTHER INFORMATION: m5c
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157 <222> LOCATION: (10)...(10) -
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160 <221> NAME/KEY: modified_base
161 <222> LOCATION: (14)...(14) /
162 <223> OTHER INFORMATION: m5c
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174 <223> OTHER INFORMATION: m5c
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179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
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183 <220> FEATURE:
184 <221> NAME/KEY: modified_base
185 <222> LOCATION: (18)...(18) /
186 <223> OTHER INFORMATION: m5c
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190 <211> LENGTH: 20
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Synthetic Oligonucleotide

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,619

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TIME: 15:34:44

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202 <223> OTHER INFORMATION: Synthetic Oligonucleotide
203 <400> SEQUENCE: 20
204         gagaacgctg gaccttccat                                20
205 <210> SEQ ID NO 21
206 <211> LENGTH: 20
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Synthetic Oligonucleotide
211 <400> SEQUENCE: 21
212         gagaacgctc gaccttccat                                20
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214 <211> LENGTH: 20
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Synthetic Oligonucleotide
219 <400> SEQUENCE: 22
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223 <212> TYPE: DNA
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225 <220> FEATURE:
226 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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228         gagcaagctg gaccttccat                                20
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230 <211> LENGTH: 20
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Synthetic Oligonucleotide
235 <220> FEATURE:
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237 <222> LOCATION: (6)...(6)
238 <223> OTHER INFORMATION: m5c
239 <400> SEQUENCE: 24
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241 <210> SEQ ID NO 25
242 <211> LENGTH: 20
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION US/09/337,619

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Line	? Error/Warning	Original Text
124	W "N" or "Xaa" used: Feature required	gctagangtt agcgt
136	W "N" or "Xaa" used: Feature required	gctagacggt agngt
164	W "N" or "Xaa" used: Feature required	atngactctn gagngttctc
176	W "N" or "Xaa" used: Feature required	atngactctc gagcgttctc
188	W "N" or "Xaa" used: Feature required	atcgactctc gagcgttntc
240	W "N" or "Xaa" used: Feature required	gagaangctg gaccttccat
252	W "N" or "Xaa" used: Feature required	gagaacgctg gacnttccat
296	W "N" or "Xaa" used: Feature required	tccatgtngg tcctgatgct
308	W "N" or "Xaa" used: Feature required	tccatgtcgg tnctgatgct
408	W "N" or "Xaa" used: Feature required	gctagacntt agtgt
420	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgatgct
1000	W "N" or "Xaa" used: Feature required	atcgactctc gagngttctc
1012	W "N" or "Xaa" used: Feature required	gctagangtt agtgt
1060	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgtngtt